Info-Hams Digest   Thu, 6 Jan 94   Volume 94 : Issue   7

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                    Requesting Yaesu FT-530 info
                     UK call book - now on disk
  US License Examination Opportunities Scheduled 1/06/94 to 4/25/94

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

SB SPCL @ ARL $ARLX001
ARLX001 Instructor nominations

ZCZC AX33
QST de W1AW
Special Bulletin 1 ARLX001

Date: 6 Jan 94 21:40:40 GMT
From: ogicse!flop.ENGR.ORST.EDU!gaia.ucs.orst.edu!umn.edu!csus.edu!netcom.com!
wa2ise@network.ucsd.edu
Subject: atomic clocks in TV networks
To: info-hams@ucsd.edu

In article <FyTPFc3w165w@jackatak.raider.net> neal@jackatak.raider.net (Neal
Griggs) writes:
>
>If you really want to reference to a rubidium or cesium standard why not
>try one of the satellite services. Both TNN (The Nashville Network) and
>CMT (Country Music Television) use a common rubidium standard for house
>reference. Since they have no network to lock or reference to they have
>to generate their own.
>
Watch out for the doppler shifts caused by the satellite's movement
in its orbit. That orbit isn't exactly a circle, and that makes the
bird move up and down and sideways. Long term, it stays put, but short
term drifts cause doppler errors in the frequency.

Date: Thu, 6 Jan 1994 05:19:02 GMT
From: qualcomm.com!vixen.cso.uiuc.edu!howland.reston.ans.net!
europa.eng.gtefsd.com!darwin.sura.net!perot.mtsu.edu!raider!theporch!jackatak!
neal@network.ucsd.edu
Subject: atomic clocks in TV networks
To: info-hams@ucsd.edu

wa2ise@netcom.com (Robert Casey) writes:

> From what I have heard from people in the broadcast TV industry, they no
> longer use the rubidium(sp) or cisium(sp) atomic clocks for a master system
> clock. Nowdays, your local TV station passes the network feed thru a
> frame synchronizer (a box that stores and delays the incomming signal a
> fraction of a frame, that fraction determined by the phase relationship
> of the TV station's house sync and the network sync. So, nowdays, the
> frequency of the local TV station's colorburst is just a crystal in a
> (probably) Tektronix 1910 generator.
>
> Better use WWV.

If you really want to reference to a rubidium or cesium standard why not
try one of the satellite services. Both TNN (The Nashville Network) and
CMT (Country Music Television) use a common rubidium standard for house

reference. Since they have no network to lock or reference to they have
to generate their own.

--
     neal@jackatak.raider.net (Neal Griggs)
------------jackatak.raider.net   (615) 377-5980 ------------

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Date: 6 Jan 1994 22:20:48 GMT
From: nothing.ucsd.edu!brian@network.ucsd.edu
Subject: Clubs and Repeaters
To: info-hams@ucsd.edu

Repeaters are easy to build. In fact, I've built two already this year;
one is 9600 bps digital and the other conventional voice. I think that
brings my record up to more than 20 repeaters - slightly more than one
for each year I've been licensed.

Really, you buy a surplus Motorola Mitrek for whatever band for like
$150 from C.W.Wolfe, snip out D1, D2, & D403, chop off the receiver coax
and add a new connector for it, and the radio part is done. Add a
antenna and duplexer, a $100 controller, bolt the whole thing in a
cabinet, add a deep-cycle battery floating on a charger, and you have it!

Takes about a day. The hardest part is waiting for the crystals to
arrive.
 - Brian

Date: 6 Jan 1994 15:42:18 GMT
From: galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!
howland.reston.ans.net!usenet.ins.cwru.edu!lerc.nasa.gov!news.larc.nasa.gov!
grissom.larc.nasa.gov!kludge@network.ucsd.edu
Subject: Clubs and Repeaters
To: info-hams@ucsd.edu

>Our local club, of which I am an officer, wants to install, own, and
>operate a repeater. The equipment, site, etc. seem to be the easy
>part (even the coordination :-). My question is this: What
>organizational structure do other clubs use to operate repeaters?

Around here, utter chaos. When the repeater breaks down, everybody
blames everyone else until someone gets around to climbing the tower
and taking a look at it.

>Not all members of the club are going to participate in the repeater
>funding or operation so there is likely to be two levels of dues and
>participation. What kind of legal agreements (if any) are required
>between the club and the trustee? Are there any legal requirements
>for the club regarding non-profit status (it will have assets and
>raise funds to support the repeater)? Should the club incorporate?

Repeater funding? Who needs funding... you get a couple old GE progress-line
decks at a hamfest and build a controller. If you want to get fancy you
can spend a couple hundred bucks and buy a commercial controller with features
you'll never need. Ongoing maintenance cost is minimal, although the
labor required is significant.

>Being neophites at this, I would like to hear what other
>clubs/organizations have done and how they have structured
>themselves to deal with this.

The usual strategy is to get someone else to do all the work... he'll find
someone else to do it and eventually you find someone who wants it done
badly enough to do it.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

Date: 6 Jan 94 23:42:42 GMT
From: mnemosyne.cs.du.edu!nyx10!jmaynard@uunet.uu.net
Subject: Clubs and Repeaters
To: info-hams@ucsd.edu

In article <2gi2s0INN3k6@network.ucsd.edu>,
Brian Kantor <brian@nothing.ucsd.edu> wrote:
>Really, you buy a surplus Motorola Mitrek for whatever band for like
>$150 from C.W.Wolfe, snip out D1, D2, & D403, chop off the receiver coax
>and add a new connector for it, and the radio part is done. Add a
>antenna and duplexer, a $100 controller, bolt the whole thing in a
>cabinet, add a deep-cycle battery floating on a charger, and you have it!

Make sure, of course, that when you bolt it in the cabinet, that you don't try
to key the transmitter with the audio line... :-)

Brian, if you keep telling the unwashed masses how easy it is, we'll just have
more trouble dealing with coordinations! :-)
--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
        "A good flame is fuel to warm the soul." -- Karl Denninger

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Date: 6 Jan 94 21:38:28 GMT
From: ogicse!emory!europa.eng.gtefsd.com!fs7.ece.cmu.edu!fs7!jka@network.ucsd.edu
Subject: Connecting multi-line phone to single-line outlet.
To: info-hams@ucsd.edu

This doesn't have much to do with ham radio, but I'd be willing to bet
money that someone in this group knows the answer. Actually, it is
related to ham radio in that it involves dragging old equipment into
the house and fixing it up.

I recently came into possesion of an old multi-line telephone. OK, I
dug it out of the trash. It's one of those that has the five clear
buttons on the front along with a red "hold" button. It has a big
bundle of wire coming out of the back of it. I'd like to connect it
to a single-line outlet. How can I do this?

Inside the phone, the big bundle of wires is connected to a terminal
strip where the terminals have labels like: 1R, 1T, 1H, L1, LG, 2R,
2T, 2H, L2, LG, etc, five times. My guess is that I should disconnect
the big bundle of wires and hook the four wires in my single-line
(black, red, green, and yellow) outlet to four of the 1R, 1T, 1H, L1,
LG terminals.

Any help would be appreciated.

- Jay (KE3AT)

Date: 6 Jan 94 20:45:58 GMT
From: ogicse!hp-cv!sdd.hp.com!cs.utexas.edu!news.tamu.edu!furuta@network.ucsd.edu
Subject: How does it work?
To: info-hams@ucsd.edu

Well, maybe it's relevant to radio and maybe not, but I'm sure that
someone here can explain this to me!

I'm sure that many of you are familiar with the anti-theft stickers
that have appeared especially on tapes and CDs. About an inch square,
the adhesive-backed underside contains a set of concentric traces
along the edge surrounded by a different colored border that blobs
over one of the corners into the center. Disabling the device seems
to involve sticking a patch of some sort on top of it.

So what's the mechanism and how does it work?

```
        --Rick
          KE3IV
          furuta@cs.tamu.edu
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 I sell stuff at the TRW swapmeet every month. I've been there for about
 six years now. Everything I sell comes with this simple guarantee:
 "If it is supposed to work it does, and if it is supposed to be broken,
 it is...."

 A couple of isles over from me is Richard with his house of horrors.

 Bags of kits will sit out in the rain, and the following month when the
 sun is out, the bags are wet inside. Typically the kits are about 90%
 correct. Most of them are either missing a part or have the wrong one.

 A friend of mine bought several baycom packet modem clone kits and most
 of them didn't work. It took him several hours to finally find the problem.
 The PC board material was real sensitive to heat. If you got a tad carried
 away with the old black beauty gutter iron, the modems wouldn't work.

 Tiger Tronics sells the Baycomm modems with a manual, connectors, cables
 and software. Plug and play as they say. Guess the kludge was worth the
 $29 saved eh?

 I bought one of the $20 gel-cell charger and had to fix it before it
 would work. I figured I was paying for the magazine artical reprint
 and a basic kit as the starting point.

 People, you get what you pay for. As a very good friend of mine once
 said; "Pay shit. Get shit."

 73 es GE from Jeff

 Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
 US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
   Phone: 1 (310) 324-6080 | badly run corporation."

In article LEx@tc.fluke.COM, swifty@tc.fluke.COM (Steve Swift) writes:
>
>I purchased a Ramsey Shortwave Receiver kit for my 8 year daughter
>this Christmas. We haven't built it yet, but studying the schematic
>shows several fundamental design errors. Clearly their circuits are
>designed by people who know enough electronics to design "home projects"
>but not enough to come up with a marketable product. I suspect that
>the receiver may work to some degree, but I've already planned a few
>mods. Too bad I didn't take the time to design one myself.

I've noticed this about the Ramsey kits I've seen/built.

The FX series of transceivers are poorly done in some critical ways. In fact,
I'm a little surprised at how needlessly bad some of the design appears to be.
The front ends on the 2m, 220 and 440 radios have several transistors of
pre-amplification with a fairly cheesy bandpass filter, driving a single-chip
receiver. This is rather astonishing; the single-chip receiver doesn't have a
very strong mixer, has a fair amount of gain, yet, for some strange reason, the
Ramsey designer decided to load it right up with a bunch of wideband gain.
This kind of design may appear to give good sensitivity, but it is quite naive
with respect to RF.

The 10m FM receiver kit does a similar thing; again, a weak mixer (NE602) is
preceeded by a pre-amplifier with very little bandpass filtering. This thing
overloads if you look at it hard.

The front ends of the FX transceivers would really win if Ramsey tossed the
multi-stage pre-amplifiers, saved the cost of the transistors, used a better
input bandpass filter, a single stage of relatively strong pre-amplification
(even a common-gate J310 would be good up to UHF) and used a stronger mixer
(i.e., a DBM diode mixer). If they did this, they could probably achieve
receiver performance comparable to a modern Motorola mobile. It seems that
the Ramsey folks didn't even try to do an analysis of gain distribution.

The VCO in the synthesizer is unshielded in every FX radio, and with the
relatively large values of loop division encountered, are begging for microphonics
and increased reference sidebands. Not surprisingly, the UHF radio I looked
at on a spectrum analyzer was rather lousy. The QST review of the 2m radio
mentioned that the radio had illegal levels of spurious output on the transmitter
until some modifications were made. How would the average kit builder who
has no spectrum analyzer have noticed this?

>The LM358 op-amp with both inputs at 0volts bias, with an AC signal
>coming in was the first clue.

Typical Ramsey. They probably couldn't purloin this part of the circuit
from a manufacturer's application note.

Don't get me wrong, I'm not anti-kit; I'm just really concerned that many
naive amateurs are buying these cheesy radios and don't have the resources
to make them work correctly. I've heard people say things like "Ramsey kits
are good 'cause you get to actually engineer them when you build them", but
I think this is assuming way too much about the average kit builder. Most
people that build a kit have an expectation that the kit will work reasonably
when you build it according to the instructions. Ramsey kits do not meet
this expectation.

---
 * Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
 * (310) 348-6043 | mine and do not necessarily *
 * Dana.Myers@West.Sun.Com | reflect those of my employer *
 * This Extra supports the abolition of the 13 and 20 WPM tests *

Date: Thu, 6 Jan 1994 07:30:01 -0600
From: pa.dec.com!SALCIUS2.csg.mot.com!scottm@decwrl.dec.com
Subject: Ramsey kits not too good?
To: info-hams@ucsd.edu

>This is an attitude that will turn hams into appliance operators PDQ.
>Building kits is not supposed to be just entertainment but should also
>teach some electronics. There is no reason why they should work poorly.
>
Hams are already appliance operators. The question should be is it wrong to
be an appliance operator. With todays level of complexity most newly
graduated engineers cannot design a radio to compete with an off the shelf
model. I would not expect a person who has devoted maybe 4 to 5 weeks of
studing basic electronic theory to even come close to this task. However,
it is not outside of most hams skill level to put togather boxes into a
system that can perform a new task. An example is packet operations. Are
the individuals who put togather packet stations and networks just
appliance operators? Maybe, but did they meet tentes of ham radio to
explore new communications technologies? I beleive they did. As for
building kits they give the experience of how to solder and troubleshoot
but not much more than that (excluding the fun of doing it yourself). I do
believe that it is always the manufacture\"s responsibility to produce
quality merchandise and when a problem arises to help the customer. If a
company does not do that then they will perish in the market. I know from
my experience if one of my products has a defect in it, it is myself who

calls the vendor of the defective part and holds them accountable. In the
mean time I will have taken care of my customer so he will remain happy and
satisfied. If the vendor of the defective part does not want to stand
behind their product they are cut off from suppling us. This is of course
what we all expect from a manufacturer. For example if you buy a car and
the altenator is defective do you call the altenator suplier or do you go
back to the dealer and demand action?

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****************************************************************
```
*Scott F. Migaldi, KF5JQ
*email: Scott_Migaldi@csg.mot.com

Date: 6 Jan 94 21:36:29 GMT
From: news-mail-gateway@ucsd.edu
Subject: Requesting Yaesu FT-530 info
To: info-hams@ucsd.edu

I am looking at dual-band HT's and like the features and feel of
the Yaesu FT-530. Could someone send me info and their comments on
the 800MHZ receive mods? I have searched the net for this, but can't
find it.

Thanks,

Dan Fleek
dcfleek@adpc.purdue.edu
Purdue University
N9PNA

Date: Thu, 6 Jan 1994 11:57:04 GMT
From: agate!howland.reston.ans.net!pipex!Q.icl.co.uk!dsbc!iclbra!prs@ames.arpa
Subject: UK call book - now on disk
To: info-hams@ucsd.edu

Last night (5/1/93) I was given two disks - the contents of which were
all the entries from the 1992 UK call book.

I was quite suprised as I thought that SSL were not allowed to release
the information other than to organisations such as the RSGB to
produce a paper call book.

I have a feeling that it leaked from the RSGB.
If it has been leaked then there has been a serious breach of the
data protection act and I would like to check this out BEFORE I
use the information on the disks.

Anyone else seen or know anything about this ?

73
Peter
G0PUB

--... ...--   -.. .   --. ----- .--. ..- -...   -.- (Pub Inspector)
Peter Swynford is available... TEL: +44 344 472625 FAX: +44 344 473300
or at prs@oasis.icl.co.uk   ICL: 7263-2625   AX25: G0PUB@GB7BEQ.GBR.EU
Disclaimer: See Paragraph 2.4.a of section 1.a (article 7) (iii) of the
            Town and Country Planning Act, 1967.

Date: Thu, 6 Jan 1994 08:11:46 MST
From: news.cerf.net!pagesat.net!olivea!sgigate.sgi.com!sgiblab!swrinde!
cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca!alberta!
nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: US License Examination Opportunities Scheduled 1/06/94 to 4/25/94
To: info-hams@ucsd.edu

AMATEUR RADIO EXAMINATION OPPORTUNITIES

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Special Note: Amateur Radio licenses usually arrive between 8 and
    10 weeks after the test session. The FCC considers their
    processing time to be 90 days--from the date they receive the
    application. The FCC usually receives the application one
    to two weeks after the test session (once the VE Team and the
    coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a
    Morse code test) will not receive a new license from the FCC.

The existing Technician license plus the CSCE conveying the Morse
code test credit is the only documentation issued for use of
the additional HF privileges.

****

The following test session information is provided by the
ARRL/VEC for the upcoming six to eight week period. For
further information, please contact the test session CONTACT
PERSON at the telephone number provided. If necessary, you
may contact the ARRL/VEC at 203-666-1541 x282 for additional
information. Electronic mail may be forwarded to the ARRL/VEC
via USENET at "bjahnke@arrl.org" or via MCI Mail to
MCI ID: 215-5052.

Although the test session information presented here does
not indicate whether walk-ins are accepted or not, most test
sessions do allow walk-ins. We encourage you, however, to
always contact the CONTACT PERSON at the telephone number
provided so that the VE Team is aware that you be attending
the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or
how to locate Amateur Radio clubs, instructors, licensing
classes and/or Novice examiners in your area; please contact
the ARRL Educational Activities Department (EAD) at 203-666-
1541 x219. The EAD can also provide information on
recommended study materials. Electronic mail may be forwarded
to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to
MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE
Test Date,VEC,City,,Contact Phone,Contact Person

The SECOND field in the following listing specifies the VEC
which is coordinating this examination. This single-character
designator denotes the VEC as defined below. An "A" (for example)
indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not
find any examinations listed for your area, you may contact

any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
    The 1994 test fee is $5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
    (d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
    (or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
    205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
    704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
    708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
    818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368; No phone

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
    808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
    (d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
    414-774-6999. Test fee for 1994 is $5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
    301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
    408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
    919-841-7576

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W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
    Knoxville, TN 37912-2500; 615-688-7771.
    The 1994 test fee is $5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
    The 1994 test fee is $5.75.


EXAMINATION OPPORTUNITIES OUTSIDE THE UNITED STATES:

01/10/94,A,Australia,,089-531-305,Maury Hatfield

01/08/94,A,Belgium,,32-1143-9164,Ronald Torfs

01/08/94,A,Germany,,49-0-67253462,Stephen Hutchins, KN6G

01/29/94,A,Okinawa,,011-8-1-6117-33-1728,Alice Kottmyer

01/23/94,A,Papua New Guinea,,,Kyle Harris KE9TZ

01/28/94,A,Saudi Arabia,,966-3-878-501,David Hart

01/10/94,A,Russia,,095-450-3205,Ed Kristky

US VIRGIN ISLANDS
01/08/94,A,St Croix,,809-778-3156,Frank Jaeger
04/09/94,A,St Croix,,809-778-3156,Frank Jaeger

*EOF

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Date: (null)
From: (null)
SB SPCL ARL ARLX001
ARLX001 Instructor nominations

Who's your favorite ham radio educator?  If you know of a deserving
volunteer instructor, professional teacher who uses Amateur Radio in
the classroom, or an instructor who offers ham radio classes at a
local college, nominate them for any of the following awards: 1993
ARRL Herb S. Brier Instructor of the Year (volunteer instructor),
ARRL Professional Educator of the Year (school teacher) or the ARRL
Professional Instructor of the Year (instructor who receives payment
for instruction, such as at a college).  Time is running out.
Nominations must be received by your Section Manager (page 8, QST)
by January 31.
NNNN
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/EX

Date: 6 Jan 94 09:30:50 GMT
From: ogicse!uwm.edu!vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!
panix!not-for-mail@network.ucsd.edu
To: info-hams@ucsd.edu

References <1994Jan05.065815.24300@wattres.sj.ca.us>,
<1994Jan5.125300.21517@mnemosyne.cs.du.edu>, <2gfgip$lp9@skates.gsfc.nasa.gov>
Subject : Re: Repeater database?

In article <2gfgip$lp9@skates.gsfc.nasa.gov>,
Richard Mitchell 1026 <mitchell@aol14.wff.nasa.gov> wrote:

>If someone really wanted to steal the repeater (or whatever), why
>wouldn't they just go on a foxhunt to find it? I dunno, but
>around here the physical locations aren't kept secret. In talking
>with other club members, its usually pretty easy to find out where
>the repeater is.
>
>Maybe we just get along better over here...or maybe i'm just niave.
>

Believe me, this is a *real* problem in the NYC area. We've had several
coordinated repeaters in this area physically attacked or stolen,
apparently by thoseinterested in putting up systems of their own, or whao
have already out up uncoordinated systems.

Hopefully this will not spread outside the more populated metro areas, but
I wouldn't count on it.

73, Andy
--
        _____ Andrew Funk, KB7UV _____
        | President, Tri-State Amateur Repeater Council (TSARC) |
        | ENG Editor/Microwave Control, WCBS-TV Channel 2 News, New York |
        | Internet: kb7uv@panix.com   Packet: kb7uv@kb7uv.#nli.ny.usa |

End of Info-Hams Digest V94 #7
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